

David M. Boore's Publications

1. Boore, D.M., 1966, The influence of layout-geometry on the attenuation of multiple reflected energy in stacked traces: Shell Oil Company, California Div., EMR 2452.
2. Boore, D.M., Prewitt, R. H., and Hughes, D. R., 1967, Layout: a program to analyze multiple cancellation as a function of shooting geometry: Shell Oil Company, Colorado Div., EMR 2456.
3. Boore, D.M., and Toksoz, M.N., 1969, Rayleigh wave particle motion and crustal structure: Bulletin of the Seismological Society of America, v. 59, p. 331-346.
4. Boore, D.M., 1969, The effects of higher mode contamination on measured Love wave phase velocities: Journal of Geophysical Research, v. 74, p. 6612-6616.
5. Boore, D.M., 1970, Love waves in non-uniform wave guides: finite difference calculations: Journal of Geophysical Research, v. 75, p. 1512-1527.
6. Boore, D.M., Larner, K.L., and Aki, K., 1971, Comparison of two independent methods for the solution of wave-scattering problems: response of a sedimentary basin to vertically incident SH waves: Journal of Geophysical Research, v. 76, p. 558-569.
7. Boore, D.M., Aki, K., and Todd, T., 1971, A two-dimension moving dislocation model for a strike-slip fault: Bulletin of the Seismological Society of America, v. 61, p. 177-194.
8. Boore, D.M., 1972, A note on the effect of simple topography on seismic SH waves: Bulletin of the Seismological Society of America, v. 62, p. 275-284.
9. Boore, D.M., 1972, Finite difference methods for seismic wave propagation in heterogeneous materials: Chapter 1 in Methods in Computational Physics, v. II (Bolt, B.A., ed.), Academic Press.
10. Boore, D.M., and Page, R. A., 1972, Acceleration near-faulting in moderate-sized earthquakes: U.S. Geological Survey Open-File Report 72- .
11. Page, R.A., Boore, D.M., Joyner, W.B., and Coulter, H.W., 1972, Ground motion values for use in the seismic design of the trans-Alaska pipeline system: U.S. Geological

Survey Circular 672.

12. Boore, D.M., and Hill, D.P., 1973, Wave propagation characteristics in the vicinity of the San Andreas fault: Proc. Conf. on Tectonic Problems of the San Andreas Fault (Kovach, R.L., and Nur, A., eds.), Stanford University, p. 215-224.
13. Boore, D.M., 1973, The Pacoima Dam accelerogram of the February 9, 1971, San Fernando earthquake implications of local site topography: Bulletin of the Seismological Society of America, v. 63, p. 1603-1609.
14. Wesson, R.L., Page, R.A., Boore, D.M., and Yerkes, R.F., 1974, Expectable earthquakes and their ground motions in the Van Norman reservoirs area, northern San Fernando Valley, California: U.S. Geological Survey circular 691B, 9 p.
15. Boore, D.M., and Zoback, M.D., 1974, Near-field motions from kinematic models of propagating faults: Bulletin of the Seismological Society of America, v. 64, p. 321-342.
16. Boore, D.M., and Zoback, M.D., 1974, Two-dimensional kinematic fault modeling of the Pacoima Dam strong-motion recordings of the February 9, 1971, San Fernando earthquake: Bulletin of the Seismological Society of America, v. 64, p. 555-570.
17. Alford, R.M., Kelley, K.R., and Boore, D.M., 1974, Accuracy of finite difference modeling of the acoustic wave equation: Geophysics, v. 39, p. 834-842.
18. Boatwright, J., and Boore, D.M., 1974, A simplification in the calculation of motions near a propagating dislocation: Bulletin of the Seismological Society of America, v. 65, p. 133-138.
19. Boore, D.M., 1974, Empirical and theoretical study of near-fault wave propagation: Proc. 5th World Conf. on Earthquake Engineering, Rome.
20. Boore, D.M., 1974, Book review of Peace in Mind in Earthquake Country: How to Save Your Home and Life: Bulletin of the Seismological Society of America, v. 64, p. 2027-2028.
21. Boore, D.M., 1975, Seismology (review): Geotimes, January, p. 23-24.
22. Boore, D.M., McEvilly, T.V., and Lindh, A.G., 1975, Quarry blast sources and

- earthquake prediction: the Parkfield, California, earthquake of June 28, 1966: *Pure and Appl. Geophys.*, v. 113, p. 293-296.
23. Boore, D.M., Lindh, A.G., McEvilly, T.V., and Tolmachoff, W.W., 1975, A search for travel time changes associated with the Parkfield, California, earthquake of 1966: *Bulletin of the Seismological Society of America*, v. 64, p. 1407-1418 .
 24. Page, R.A., Boore, D.M., and Dieterich, J.H., 1975, Estimation of bedrock motion at the ground surface in Studies for Seismic Zonation of the San Francisco Bay Region: U.S. Geological Survey Professional Paper 941A.
 25. Boore, D.M., and Stierman, D.J., 1976, Source parameters of the Point Mugu, California, earthquake of 21 February 1973: *Bulletin of the Seismological Society of America*, v. 66, p. 385-404.
 26. Boore, D.M., 1976, Seismology (review): *Geotimes*, v. 21, p. 37.
 27. Boore, D.M., 1976, Research summary - Stanford University: Proc. Fourth National Meeting of the Universities Council for Earthquake Engineering Research, Vancouver, Canada, p. 118-120.
 28. Boore, D.M., 1977, Seismology (review): *Geotimes*, January.
 29. Boore, D.M., 1977, Strong motion recordings of the California earthquake of April 18, 1906: *Bulletin of the Seismological Society of America*, p. 561-577.
 30. Boore, D.M., 1977, The motion of the ground in earthquakes: *Scientific American*, v. 237, p. 66-78.
 31. Boore, D.M., and Dunbar, W.S., 1977, Effect of the free surface on calculated stress drops: *Bulletin of the Seismological Society of America*, p. 1661-1665.
 32. Boore, D.M., and Joyner, W.B., 1978, The influence of rupture incoherence on seismic directivity: *Bulletin of the Seismological Society of America*, p. 283-300.
 33. Stauber, D.A., and Boore, D.M., 1978, Crustal thickness in northern Nevada and southeastern Oregon from seismic refraction profiles: *Bulletin of the Seismological Society of America*, p. 1049-1058.

34. Cramer, C.H., and Boore, D.M., 1978, The effect of Nevada test site geology on absolute travel time residuals at Matsushiro, Japan, and College, Alaska: Bulletin of the Seismological Society of America, p. 859-862.
35. Boore, D.M., Oliver, A.A. III, Page, R.A., and Joyner, W.B., 1978, Estimation of ground parameters: U.S. Geological Survey Circular 795, 43 p.
36. Boore, D.M., 1978, Earth science: Geophysics: Yearbook of Science and the Future, Encyclopaedia Britannica.
37. Swanger, H.J., and Boore, D.M., 1978, Simulation of strong motion displacements using surface wave modal superposition: Bulletin of the Seismological Society of America, p. 907-922.
38. Swanger, H. J., and Boore, D.M., 1978, Importance of surface waves in strong ground motion in the period range of 1 to 10 seconds: Proc. 2nd Int'l. Conference on Microzonation, San Francisco, v. III, p. 1447-1457.
39. Archuleta, R. J., Joyner, W. B., and Boore, D.M., 1978, A methodology for predicting ground motion at specific sites: Proc. 2nd Int'l. Conference on Microzonation, San Francisco, v. 1, p. 255-265.
40. Boore, D.M., 1978, Modeling of near-fault motions: Proc. NSF Seminar Workshop on Strong Ground Motion (D. V. Helmberger and P. C. Jennings, organizers), p. 30-35.
41. Boore, D.M., 1978, Near-fault strong ground motions: Proc. I Congress Ibero Latino Americano de Geofisica, Caracas, Venezuela.
42. Archuleta, R. J., Joyner, W. B., and Boore, D.M., 1979, A methodology for predicting ground motions at specific sites, in Progress on Seismic Zonation in the San Francisco Bay Region (E. E. Brabb, ed.): U.S. Geological Survey Circular 807.
43. Boore, D.M., Joyner, W.B., Oliver, A.A. III, and Page, R.A., 1980, Peak acceleration, velocity, and displacement from strong motion records: Bulletin of the Seismological Society of America, p. 305-321.
44. Hudson, J. A., and Boore, D.M., 1980, Comments on Scattered waves from a surface obstacle by J. A. Hudson: Geophys. J., v. 60, p. 123-127.

45. Savy, J. B., Shah, H. C., and Boore, D.M., 1980, A non-stationary risk model with geophysical input: J. Struc. Div., ASCE, v. 106, no. ST1, p. 145-153.
46. Boore, D.M., 1980, On the attenuation of peak velocity: Proc. 7th World Conf. on Earthquake Engineering, Istanbul, v. 2, p. 577-584.
47. Joyner, W. B., and Boore, D.M., 1980, A stochastic source model for synthetic strong-motion seismograms; Proc. 7th World Conf. on Earthquake Engineering, Istanbul, v. 1, p. 1-8.
48. Boore, D.M., and Porcella, R. L., 1980, Peak horizontal ground accelerations from recent earthquakes in western North America: Bulletin of the Seismological Society of America, v. 70, p. 2295-2297.
49. Dunbar, W. S., Boore, D.M., and Thatcher, W., 1980, Pre-, co- and postseismic strain changes associated with the 1952 ML = 7.2 Kern County, California, earthquake: Bulletin of the Seismological Society of America, v. 70, p. 1893-1905.
50. Boore, D.M., 1980, Strong-motion recordings as seismograms (invited paper: Research Conf. on Earthquake Engineering, Skopje, Yugoslavia, convened by U.S.-Yugoslav Joint Board on Scientific and Technological Cooperation).
51. Anicic, D., Berz, G., Boore, D., Bouwkamp, J., Hakenbeck, U., McGuire, R., Sims, J., and Wiecezorek, G., 1980, Reconnaissance Report Montenegro, Yugoslavia, earthquake, April 15, 1979 (R.B. Matthiesen, coordinator, A. Leeds, Editor): Earthquake Engineering Research Institute.
52. Lindh, A.G., and Boore, D.M., 1981, Control of rupture by fault geometry during the 1966 Parkfield, California, earthquake: Bulletin of the Seismological Society of America, v. 71, p. 95-116
53. Boore, D.M., Kanamori, H., Harding, S., and Sims, J., 1981, The Montenegro earthquake of April 15, 1979: source orientation and strength: Physics Earth Planetary Int., v. 27, p. 133-142.
54. Boore, D.M., Harmsen, S.C., and Harding, S.T., 1981, Wave scattering from a step change in surface topography: Bulletin of the Seismological Society of America, v. 71,

p. 117-125.

55. Joyner, W.B., and Boore, D.M., 1981, Peak horizontal acceleration and velocity from strong-motion records including records from the 1979 Imperial Valley, California, earthquake, *Bulletin of the Seismological Society of America*, v. 71, p. 2011-2038.
56. Fletcher, J.B., Zepeda, R.L., and Boore, D.M., 1981, Digital seismograms of aftershocks of the Imperial Valley, California, earthquake of October 15, 1979, U.S. Geological survey Open-File Report 81-655.
57. Boore, D.M., and Porcella, R. L., 1982, Peak horizontal ground accelerations from the 1979 Imperial Valley earthquake: comparison with data from previous earthquakes in U.S. Geological Survey Professional Paper 1254, 439-441.
58. Boore, D.M., and Fletcher, J. B., 1982, A preliminary study of selected aftershocks on the 1979 Imperial Valley earthquake from digital acceleration and velocity recordings in U.S. Geological Survey Professional Paper 1254, 109-118.
59. Daniel, R. G., and Boore, D.M., 1982, Anomalous shear wave travel time delays and surface wave velocities at Yellowstone Caldera, Wyoming: *Journal of Geophysical Research*, 87, 2731-2744.
60. Boatwright, J., and Boore, D.M., 1982, Analysis of the ground accelerations radiated by the 1980 Livermore Valley earthquakes for directivity and dynamic source characteristics: *Bulletin, Seismological Society of America*, v. 72, p. 1843-1865.
61. Joyner, W. B ., and Boore, D.M., 1982, Estimation of response-spectral values as functions of magnitude, distance, and site conditions: U.S. Geological Survey Open-File Report 82-881, 28 p.
62. Joyner, W. B., and Boore, D.M., 1982, Prediction of earthquake response spectra: U.S. Geological Survey Open-File Report 82-977, 16 p.
63. Boore, D.M., and Joyner, W. B., 1982, The empirical prediction of ground motion: *Bulletin, Seismological Society of America*, v. 72, p. S43-S60.
64. McCann, M. W., Jr., and Boore, D.M., 1982, Variability in ground motions: a factor in microzonation: *Proceedings of the Third International Conference on Earthquake*

- Microzonation, 1, Convened Seattle, Washington, June 28-July 1, 1982, p. 471-482.
65. Mueller, C. S., Boore, D.M., and Porcella, R. L., 1982, Detailed study of site amplification at El Centro strong-motion array station 6, Proceedings of the Third International Conference on Earthquake Microzonation, 1, Convened Seattle, Washington, June 28-July 1, 1982, p. 413-424.
66. Boore, D.M., Hsieh, L. L., Iwan, W. D., Peng, K. Z., and Teng, T. L., 1982, USA-PRC cooperative project on strong ground motion: Proceedings US-PRC Bilateral Workshop on Earthquake Engineering, Harbin, China, 1, A A-1-12.
67. Boore, D.M., 1982, The properties and prediction of strong ground motion in Earthquake Ground Motion and its effects on structures (S. K. Datta, ed.), American Society Mechanical Engineers, AMD-53, 3-20.
68. Boore, D.M., 1983, Strong-motion seismology, Reviews of Geophysics and Space Physics, v. 21, 1308-1318.
69. McCann, W. M., Jr., and Boore, D.M., 1983, Variability in ground motions: root-mean-square acceleration and peak acceleration for the 1971 San Fernando, California earthquake: Bulletin, Seismological Society of America, v. 73, 615-632.

*** Promotion from GS 14 to GS 15 ***

70. Boore, D.M., 1983, Stochastic simulation of high-frequency ground motions based on seismological models of the radiated spectra: Bulletin, Seismological Society of America, v. 73, p. 1865-1894.
71. Boore, D.M., and Joyner, W.B., 1983, Ground motions and response spectra at soil sites from seismological models of radiated spectra: U.S. Geological Survey Open-File Report 83-845, p. 261-279.
72. Joyner, W.B., and Boore, D.M., 1983, Comments on new attenuation relations for peak and expected accelerations of strong ground motion by B.A. Bolt and N.A. Abrahamson: Bulletin, Seismological Society of America, v. 73, p. 1479-1480.
73. Boore, D.M., 1984, Use of seismoscope records to determine ML and peak velocities:

- Bulletin, Seismological Society of America, v. 74, 315-324.
74. Hanks, T.C., and Boore, D.M., 1984, Moment-magnitude relations in theory and practice: *Journal of Geophysical Research*, v. 89, 6229-6235.
 75. Boore, D.M., and Joyner, W.B., 1984, On the use of random vibration theory to predict peak amplitude of transient signals: *Bulletin, Seismological Society of America*, v. 74, 2035-2039.
 76. Boore, D.M., and Joyner, W.B., 1984, Ground motions and response spectra at soil sites from seismological models of radiated spectra: *Proceedings, Eighth World Conference on Earthquake Engineering*, v. II, 457-464.
 77. Boore, D.M., Lindh, A.G., Tucker, B.E., Shakal, A.F., and McJunkin, R.D., 1984, Some studies concerning site response: Part 1. Preliminary analysis of Parkfield array recordings of the Coalinga earthquake; Part 2. Stability of empirical estimates of site response: *U.S. Geological Survey Open-File Report*.
 78. Iwan, W.D., Boore, D.M., Hsieh, L-L., Peng, K-Z., and Teng, T-L., 1984, The U.S.-China cooperative strong ground motion project: *Proceedings, Eighth World Conference on Earthquake Engineering*, v. II, 23-30.
 79. Boore, D.M., 1983, Stochastic simulation of high-frequency ground motions based on seismological models of the radiated spectra: *International Workshop on Earthquake Engineering*, Tongji University, Shanghai, China, A-3 A-3-17.
 80. Joyner, W.B., and Boore, D.M., 1984, Magnitude saturation, in *Strong Ground Motion Simulation and Earthquake Engineering Applications* (R.E. Scholl and J.L. Kine, eds.): *Earthquake Engineering Research Institute Publication 85-02*, p. 12-1 to 12-8.
 81. Joyner, W.B., and Boore, D.M., 1984, Ground motion prediction for design: *Progress and issues: Applied Technology Council Meeting*.
 82. Boore, D.M., and Boatwright, J., 1984, Average body-wave radiation coefficients: *Bulletin of the Seismological Society of America*, v. 74, 1615-1621.
 83. Peng, K., Xie, L., Li, S., Boore, D.M., Iwan, W.D., and Teng, T.L., 1985, The near-source strong-motion accelerograms recorded by an experimental array in Tangshan,

- China: Physics of the Earth and Planetary Interiors, v. 38, p. 92-109.
84. Boore, D.M., 1986, Short-period P-wave radiation from large earthquakes: implications for spectral scaling laws: Bulletin Seismological Society of America, v. 76, p. 43-64.
 85. Joyner, W.B., and Boore, D.M., 1986, On simulating large earthquakes by Green's-function addition of smaller earthquakes: Earthquake Source Mechanics, American Geophysical Union Monograph 37, 269-274.
 86. Boore, D.M., 1986, The effect of finite bandwidth on seismic scaling relationships: Earthquake Source Mechanics, American Geophysical Union, Monograph 37, 275-283.
 87. Haar, L.C., Mueller, C.S., Fletcher, J.B, and Boore, D.M., 1986, Comments on Some recent Lg phase displacement spectral densities and their implications with respect to prediction of ground motions in eastern North America by R. Street: Bulletin Seismological Society of America, v. 76, p. 291-295.
 88. Boore, D.M., and Atkinson, G.M., 1987, Stochastic prediction of ground motion and spectral response parameters at hard-rock sites in eastern North America: Bulletin, Seismological Society of America, v. 77, p. 440-467.
 89. Boore, D.M., 1986, The prediction of strong ground motion, in Strong Ground Motion Seismology, (M.O. Erdik and M.N. Toksoz, eds.) D. Reidel, Dordrecht, 109-141.
 90. Safak, E. and D.M. Boore, 1986, On nonstationary stochastic models for earthquakes: U.S. National Conference on Earthquake Engineering, Proceedings, 3rd, Charleston, S. Carolina.
 91. Boore, D.M., 1987, The estimation of ground shaking caused by earthquakes: Canadian Conference on Earthquake Engineering, Ottawa, Canada Proceedings, 5th, A.A. Balkema, Rotterdam, 27-38.
 92. Boore, D.M. and Joyner, W.B., 1986, Prediction of earthquake ground motion at periods of interest for base-isolated structures: Base Isolation and Passive Energy Dissipation, ATC-17, Applied Technology Council, Redwood City, CA,. 355-370.
 93. Boore, D.M., 1986, Prediction of strong ground motions, in Future Directions in Evaluating Earthquake Hazards in Southern California: U.S. Geological Survey Open-

File Report 86-401, p. 189–201.

94. Safak, E. and Boore, D.M., 1988, On low-frequency errors of uniformly modulated filtered white-noise models for ground motions: *Earthquake Engineering and Structural Dynamics*, v. 16, 381-388.
95. Atkinson, G.M. and Boore, D.M., 1987, on the MN, M relation for eastern North American earthquakes, *Seismological Research Letters*, v. 58, p. 119-124.
96. Boore, D.M. and Atkinson, G.M., 1987, Notes on the prediction of ground motion and response spectra at hard-rock sites in eastern North America: *Proceedings of Workshop on Strong Ground Motion Predictions in Eastern North America*, Electric Power Research Institute, NP-5875, 16.1-16.16.
97. Boore, D.M., Bolt, B.A., Choy, G., Kolesnikov, Y., Osawa, Y., and Seidl, D., 1987, Worldwide seismographic recording of great earthquakes, Report to the International Council of Scientific Unions, 22 pp., 11 Figs.
98. Hutton, L.K., and Boore, D.M., 1987, The ML scale in southern California: *Bulletin of the Seismological Society of America*, v. 77, p. 2074-2094.
99. Joyner, W.B., and Boore, D.M., 1987, Ground-motion parameters for seismic design: Lecture notes for a course of Recent Advances in Earthquake-Resistant Design, University of CA, Berkeley, July 20-24, 24 pp.
100. Boore, D.M., 1987, Quantitative ground motion estimates, *Proceedings of Symposium on Seismic Hazards, Ground motions, soil-liquefaction and Engineering Practice in eastern North America*: NCEER Technical Report 87-0025, p. 248-258.
101. Boore, D.M., 1989, Quantitative ground motion estimates, *Annals: New York Academy of Science*, v. 558, p. 81-94.
102. Boore, D.M., 1989, The Richter scale: Its development and use for determining earthquake source parameters: *Tectonophysics*, v. 166, p. 114.
103. Joyner, W.B., and Boore, D.M., 1988, The estimation of ground motion: *Conference on Earthquake Engineering and Soil Dynamics II, Park City, Utah, Proceedings*, p. 43-102.

104. Atkinson, G.M. and Boore, D.M., 1990, Recent trends in ground motion and spectral response relations for North America: *Earthquake Spectra*, v. 6, p. 15-35.
105. Boore, D.M., and Atkinson, G.M., 1989, Spectral scaling of the 1985 to 1988 Nahanni Northwest Territories, earthquakes: *Bulletin of the Seismological Society of America*: v. 79, p. 1736-1761.
106. Boore, D.M., and Joyner, W.B., 1989, The effect of directivity on the stress parameter determined from ground motion observations: *Bulletin of the Seismological Society*, v. 79, p. 1984-1988.
107. Boore, D. M., and Joyner, W. B., 1990, Preliminary analysis of peak accelerations from the 1989 Loma Prieta earthquake, *Earthquake Spectra*, supplement to v. 6, p. 50-58.
108. Boore, D.M., Seekins, L., and Joyner, W.B., 1990, Peak accelerations from the 17 October 1989 Loma Prieta earthquake: *Seismological Research Letters*, v. 60, p. 151-166.
109. Page, R.A., Boore, D.M., Bucknam, R.C., and Thatcher, W.R., 1991, Goals, opportunities, and priorities for the USGS Earthquake Hazards Reduction Program: *U.S. Geological Survey Circular 1079*.
110. Joyner, W.B., and Boore, D.M., 1991, Strong earthquake ground motion and engineering design: *Geotechnical News*, v. 9, p. 21-26.
111. Boore, D.M., and Joyner, W.B., 1991, Estimation of ground motion at deep soil sites in eastern North America: *Bulletin of the Seismological Society of America*, v. 81, p. 2167-2185.
112. Boore, D.M., 1992, Predictions of response spectra for the Saguenay earthquake: *Proceedings of EPRI/USGS workshop on "Modeling Earthquake Ground Motion at Close Distances"*, EPRI TR-104975 (J.F. Schneider and P.G. Somerville, Editors), 6-1-6-14.
113. Joyner, W.B., and Boore, D.M., 1991, Empirical methods for ground motion estimation: *Proceedings POLA Seismic Workshop on Seismic Engineering*, 21-23

- March 1990, Port of Los Angeles (R.C. Wittkop and G.R. Martin, Editors), 273-308.
114. Boore, D.M., and Atkinson, G.M., 1992, Source spectra for the 1988 Saguenay, Quebec, earthquakes: Bulletin of the Seismological Society of America, v. 82, p. 683-719.
 115. Boore, D.M., Joyner, W.B., and Wennerberg, L., 1992, Fitting the stochastic model to observed response spectra in western North America: Tradeoffs between $\Delta\sigma$ and κ : Bulletin of the Seismological Society of America: Bulletin of the Seismological Society of America, v. 82, p. 1956-1963.
 116. Joyner, W.B. and Boore, D.M., 1993, Methods for regression analysis of strong-motion data: Bulletin of the Seismological Society of America, v. 83, p. 469-487.
 117. Gibbs, J.F., T.E. Fumal, D.M. Boore, and W.B. Joyner (1992). Seismic velocities and geologic logs from borehole measurements at seven strong-motion stations that recorded the Loma Prieta earthquake, U.S. Geological Survey Open-File Report 92-287.
 118. Boore, D.M. and N.N. Ambraseys (1993). Some notes concerning prediction of ground motions for GSHAP, Annali di Geofisica (Special Issue: Technical Planning Volume of the ILP's Global Seismic Hazard Assessment Program), v. 36, p. 169-180.
 119. Boore, D.M. and W.B. Joyner (1993). Empirical prediction of strong ground motion, Proceedings Structures '93 Congress, Irvine, California.
 120. Boore, D.M., K.W. Campbell, and R.B. Herrmann (1993). Estimation of ground motion in eastern North America, Chapter 3 in Hazard Assessment, Central United States Earthquake Consortium Monograph 1, p. 81-129.
 121. Gibbs, J.F., D.M. Boore, W.B. Joyner, and T.E. Fumal (1994). The attenuation of seismic shear waves in Quaternary alluvium in Santa Clara Valley, California, Bulletin, Seismological Society of America, v. 84, 76-90.
 122. Boore, D. M., W. B. Joyner, and T. E. Fumal (1993). Estimation of response spectra and peak accelerations from western North American earthquakes: An interim report, U.S. Geological Survey Open-File Report 93-509.

123. Atkinson, G. M. and D. M. Boore (1995). Ground motion relations for eastern North America, *Bulletin Seismological Society of America*, v. 85, p. 17-30.
124. Boore, D. M. (1994). Some notes concerning the determination of shear-wave velocity and attenuation, *Proceedings of workshop on "Geophysical Techniques for Site and Material Characterization"*, Atlanta, GA, 1993, 129-134.
125. Boore, D. M., W. B. Joyner, and T. E. Fumal (1994). Estimation of response spectra and peak accelerations from western North American earthquakes: An interim report, Part 2, U.S. Geological Survey Open-File Report 94-127.
126. Boore, D. M. and W. B. Joyner (1994). Prediction of ground motion in North America, *Proceedings of "Seminar on New Developments in Earthquake Ground Motion Estimation and Implications for Engineering Design Practice"*, Applied Technology Council ATC-35, Redwood City, California, p. 6-1-6-41.
127. Boore, D. M., W. B. Joyner, and T. E. Fumal (1994). A summary of recent results concerning the prediction of strong ground motions in western North America, *Proceedings of the International Workshop on Strong Motion Data*, Menlo Park, CA Dec 13-17, 1993, v. 2, 99-125.
128. Joyner, W. B. and D. M. Boore (1994). Errata, *Methods for regression analysis of strong-motion data*, *Bulletin Seismological Society of America*, v. 84, 955-956.
129. Scientists of the U.S. Geological Survey and the Southern California Earthquake Center (1994). The magnitude 6.7 Northridge, California, earthquake of 17 January 1994, *Science*, v. 266, 389-397. (I prepared Figure 5).
130. Wentworth, C.M., R.D. Borchardt, R.K. Mark, and D.M. Boore (1994). Maps of peak horizontal and vertical accelerations recorded for the Northridge, California, earthquake of January 17, 1994 and general geology of the epicentral region, U.S.G.S. Open-File Report 94-197.
131. Page, R.A., D.M. Boore, and R.F. Yerkes (1995). The Los Angeles Dam Story, U.S.G.S. Fact Sheet 096-95.
132. McGuire, R.K., D.M. Boore, G.M. Atkinson, G.R. Toro, W.B. Joyner, and G.A.

- Bollinger (1995). Discussion of “Seismic hazard assessment in the southeastern United States” by P.C. Rizzo et al, *Earthquake Spectra*, v. 11, p. 667-677.
133. Durward, J.A., D.M. Boore, and W.B. Joyner (1996). The amplitude dependence of high-frequency spectral decay: Constraint on soil non-linearity, *Proc. of International Workshop on Site Response*, Yokosuka, Japan, Port and Harbor Research Institute, v. 2, p. 82-103.
 134. Joyner, W.B. and D.M. Boore (1996). Recent developments in strong-motion attenuation relationships, *Proc. 28th Joint Meeting of U.S.-Japan Cooperative Program in Natural Resources Panel on Wind and Seismic Effects*, Gaithersburg, Maryland (N.J. Raufaste, Editor), National Institute of Standards and Technology report NIST SP 904, p. 101-116.
 135. Boore, D.M. (1996). SMSIM–Fortran programs for simulating ground motions from earthquakes: Version 1.0, U.S.G.S. Open-File Reports 96-80-A (text) and 96-80-B (diskette), 73 pp.
 136. U.S. Geological Survey (1996). USGS response to an urban earthquake: Northridge '94, U.S.G.S. Open-File Report 96-263, 78 pp.
 137. Spudich, P., J.B. Fletcher, M. Hellweg, J. Boatwright, C. Sullivan, W.B. Joyner, T.C. Hanks, D.M. Boore, A. McGarr, L.M. Baker, and A.G. Lindh (1996). Earthquake ground motions in extensional tectonic regimes, U.S.G.S. Open-File Report 96-292, 351 pp.
 138. Budnitz, R.J., G. Apostolakis, D.M. Boore, L.S. Cluff, K.J. Coppersmith, C.A. Cornell, and P.M. Morris (1997). Recommendations for probabilistic seismic hazard analysis: Guidelines on uncertainty and use of experts, U.S. Nuclear Regulatory Commission report NUREG/CR-6372 (first published as Lawrence Livermore Lab. Report UCRL-ID-122160 in 1995), 2 volumes.
 139. Boore, D.M., W.B. Joyner, and T.E. Fumal (1997). Equations for estimating horizontal response spectra and peak acceleration from western North American earthquakes: A summary of recent work, *Seism. Res. Letters*, v. 68, 128–153.

140. Atkinson, G.M. and D.M. Boore (1997). Stochastic point-source modeling of the ground motions in the Cascadia region, *Seism. Res. Letters*, v. 68, 74–85.
141. Atkinson, G.M. and D.M. Boore (1997). Some comparisons between recent ground-motion relations, *Seism. Res. Letters*, v. 68, 24–40.
142. Spudich, P., J.B. Fletcher, M. Hellweg, J. Boatwright, C. Sullivan, W.B. Joyner, T.C. Hanks, D.M. Boore, A. McGarr, L.M. Baker, and A.G. Lindh (1997). SEA96–A new predictive relation for earthquake ground motions in extensional tectonic regimes, *Seism. Res. Letters*, v. 68, 190–198.
143. Benz, H.M., A. Frankel, and D.M. Boore (1997). Regional Lg attenuation for the continental United States, *Bull. Seism. Soc. Am.*, v. 87, 606–619.
144. Boore, D.M. and W.B. Joyner (1997). Site amplifications for generic rock sites, *Bull. Seism. Soc. Am.*, v. 87, 327–341.
145. Boore, D.M. (1997). Estimates of average spectral amplitudes at FOAKE sites, Appendix C in Bandyopadhyay, K.K., D.D. Kana, R.P. Kennedy, and A.J. Schiff, An evaluation of methodology for seismic qualification of equipment, cable trays and ducts in ALWR plants by use of experience data, NUREG/CR-6464 and BNL-NUREG-52500, C-1–C-69.
146. Boore, D.M. (1997). Analysis of earthquake recordings obtained from the Seafloor Earthquake Measurement System (SEMS instruments deployed off the coast of southern California, U.S. Geological Survey Open-File Report 97-733, 242 p.
147. Cultrera, G., D.M. Boore, and W.B. Joyner (1997). Searching for nonlinear soil response in the vicinity of the Van Norman Complex, *Proc. NEHRP Conference and Workshop on Research on the Northridge, California Earthquake of January 17, 1994*, CUREE, II-100–II-107.
148. Atkinson, G.M. and D.M. Boore (1998). Evaluation of models for earthquake source spectra in eastern North America, *Bull. Seism. Soc. Am.* **88**, 917–934.
149. Boore, D.M. and L.T. Brown (1998). Comparing shear-wave velocity profiles from inversion of surface-wave phase velocities with downhole measurements: Systematic

- differences between the CXW method and downhole measurements at six USC strong-motion sites, *Seism. Res. Lett.* **69**, 222–229.
150. Boore, D.M. and L.T. Brown (1998). Erratum to “Comparing shear-wave velocity profiles from inversion of surface-wave phase velocities with downhole measurements: Systematic differences between the CXW method and downhole measurements at six USC strong-motion sites”, *Seism. Res. Lett.* **69**, 406.
 151. Budnitz, R.J., G. Apostolakis, D.M. Boore, L.S. Cluff, K.J. Coppersmith, C.A. Cornell, and P.A. Morris (1998). Use of technical expert panels: Applications to probabilistic seismic hazard analysis, *Risk Analysis* **18**, 463–469.
 152. Cultrera, G., D.M. Boore, W.B. Joyner, and C.M. Dietel (1998). Evidence for nonlinear soil response at the vicinity of the Van Norman Complex, CA, USA, following the 1994 Northridge earthquake, in *The Effects of Surface Geology on Seismic Motion*, Irikura, Kudo, Okada, and Sasatani (Editors), Balkema, Rotterdam, 779–786.
 153. Joyner, W.B. and D.M. Boore (1998). Equivalent-linear ground- response calculations with frequency-dependent damping, *Proceedings Workshop on Seismic Hazards and Ground Motion in the Region of Moderate Seismicity*, Seoul, Korea, Nov. 1998.
 154. Margaris, B.N. and D.M. Boore (1998). Determination of $\Delta\sigma$ and κ_0 from response spectra of large earthquakes in Greece, *Bull. Seism. Soc. Am.* **88**, 170–182.
 155. Boore, D.M. (1999). Basin waves on a seafloor recording of the 1990 Upland, California, earthquake: Implications for ground motions from a larger earthquake, *Bull. Seism. Soc. Am.* **89**, 317–324.
 156. Boore, D.M. (1999). Effect of baseline corrections on response spectra for two recordings of the 1999 Chi-Chi, Taiwan, earthquake, *U.S. Geol. Surv. Open-File Rept.* 99-545, 37 pp.
 157. Boore, D.M. and C.E. Smith (1999). Analysis of earthquake recordings obtained from the Seafloor Earthquake Measurement System (SEMS) instruments deployed off the coast of southern California, *Bull. Seism. Soc. Am.* **89**, 260–274.

158. Cultrera, G., D.M. Boore, W.B. Joyner, and C.M. Dietel (1999). Nonlinear soil response in the vicinity of the Van Norman Complex following the 1994 Northridge, California, earthquake, *Bull. Seism. Soc. Am.* **89**, 1214–1231.
159. Gibbs, J.F., J.C. Tinsley, David M. Boore, and W.B. Joyner (1999). Seismic velocities and geological conditions at twelve sites subjected to strong ground motion in the 1994 Northridge, California, earthquake: A revision of OFR 96-740, *U.S. Geol. Surv. Open-File Rept. 99-446*, 142 pp.
160. Spudich, P., W.B. Joyner, A.G. Lindh, D.M. Boore, B.M. Margaris, and J.B. Fletcher (1999). SEA99: A revised ground motion prediction relation for use in extensional tectonic regimes, *Bull. Seism. Soc. Am.* **89**, 1156–1170.
161. Atkinson, G.M. and D.M. Boore (2000). Reply to comment by R.A.W. Haddon on “Evaluation of models for earthquake source spectra in eastern North America” by Gail M. Atkinson and David M. Boore, *Bull. Seism. Soc. Am.* **90**, 1339–1341.
162. Boore, D.M. (2000). SMSIM – Fortran programs for simulating ground motions from earthquakes: version 2.0 — A revision of OFR 96-80-A, *U.S. Geol. Surv. Open-File Rept. OF 00-509*, 53 pp.
163. Joyner, W.B. and D.M. Boore (2000). Recent developments in earthquake ground motion estimation, Proceedings Sixth International Conference on Seismic Zonation, Palm Springs, California, Nov. 12–15, 2000, Earthquake Engineering Research Institute.
164. Gibbs, J.F., J.C. Tinsley, D.M. Boore, and W.B. Joyner (2000). Borehole velocity measurements and geological conditions at thirteen sites in the Los Angeles, California region, *U.S. Geol. Surv. Open-File Rept. OF 00-470*, 118 pp.
165. Liu, H.-P., D.M. Boore, W.B. Joyner, D.H. Oppenheimer, R.E. Warrick, W. Zhang, J.C. Hamilton, and L.T. Brown (2000). Comparison of phase velocities from array measurements of Rayleigh waves associated with microtremor and results calculated from borehole shear-wave velocity profiles, *U.S. Geol. Surv. Open-File Rept. 00-216*, 54 pp.

166. Liu, H.-P., D.M. Boore, W.B. Joyner, D.H. Oppenheimer, R.E. Warrick, W. Zhang, J.C. Hamilton, and L.T. Brown (2000). Comparison of phase velocities from array measurements of Rayleigh waves associated with microtremor and results calculated from borehole shear-wave velocity profiles, *Bull. Seism. Soc. Am.* **90**, 666–678.
167. Boore, D.M. (2001). Effect of baseline corrections on displacements and response spectra for several recordings of the 1999 Chi-Chi, Taiwan, earthquake, *Bull. Seism. Soc. Am.* **91**, 1199–1211. [Director’s approval: 08/28/00]
168. Boore, D.M. (2001). Comparisons of ground motions from the 1999 Chi-Chi earthquake with empirical predictions largely based on data from California, *Bull. Seism. Soc. Am.* **91**, 1212–1217. [Director’s approval: 12/11/00]
169. Boore, D.M. (2001). In Memoriam: William B. Joyner, *Seism. Res. Lett.* **72**, 511–513. [Director’s approval: 07/25/00]
170. Gibbs, J.F., D.M. Boore, J.C. Tinsley, and C.S. Mueller (2001). Borehole P- and S-wave velocity at thirteen stations in southern California, *U.S. Geol. Surv. Open-File Rept. OF 01-506*, 117 pp.

18b. REPORTS SUBMITTED OR ACCEPTED FOR PUBLICATION:

- Atkinson, G.M. and D.M. Boore (2001). Empirical ground relations for subduction zone earthquakes, *Proceedings, Workshop on Intralab Earthquakes in the Cascadia Subduction System: Science and Hazards*, *U.S. Geol. Surv. Open-File Rept.* , submitted. [Director’s approval: 10/05/00]
- Boore, D.M. (2002). Prediction of ground motion using the stochastic method, *Pure and Applied Geophy.* , (in press). [Director’s approval: 01/05/01]
- Boore, D.M. (2002). SMSIM: Stochastic Method SIMulation of ground motion from earthquakes, in *IASPEI Centennial International Handbook of Earthquake and Engineering Seismology*, (P. Jennings, H. Kanamori, and W. Lee, Editors), Chapter 85.13, (in press). [Director’s approval: 10/05/00]
- Boore, D.M., C.D. Stephens, and W.B. Joyner (2002). Comments on baseline correction of digital strong-motion data: Examples from the 1999 Hector Mine, California,

- earthquake, *Bull. Seism. Soc. Am.* **92**, (in press). [Director's approval: 02/01/01]
- Brown, L.T., D.M. Boore, and K.H. Stokoe, II (2002). Comparison of shear-wave slowness profiles at ten strong-motion sites from noninvasive SASW measurements and measurements made in boreholes, *Bull. Seism. Soc. Am.* **92**, submitted. [Director's approval: 01/09/02]
- Gibbs, J.F., D.M. Boore, W.B. Joyner, J.C. Tinsley, and D.J. Ponti (2002). Estimated ground motion at interstate 10 and La Cienega Boulevard Bridge collapse, west Los Angeles, California, *Seism. Res. Lett.* **73**, (submitted. [A complete rewrite of a paper that received Director's approval prior to October, 1998]
- Wang, G.-Q., D.M. Boore, H. Igel, and X.-Y. Zhou (2003). Some observations on colocated and closely-spaced strong ground motion records of the 1999, Chi-Chi, Taiwan earthquake, *Bull. Seism. Soc. Am.* **93**, submitted.